

REMARKS

This is responsive to the Advisory Action mailed on December 14, 2007. The amendment and response filed on December 7, 2007 responsive to the Office Action mailed on September 19, 2007 was not entered. In the Advisory Action, claims 1-148 stand rejected. With this response, claims 1, 77 and 115 have been amended. Claim 1 has been amended to recite that the aqueous component is an oil-in-water emulsion containing milkfat and that the aqueous component has greater than about 30 weight percent moisture. Support for these amendments can be found, for example, on page 4, lines 17-24, and page 5, lines 1-3. Claim 77 has been amended to recite that the solids component is a powder. Support for this amendment is found, for example, on page 6, lines 8-11. Claim 115 has been amended to recite that the dairy sauce is storable and heat stable. Support for this amendment can be found throughout the specification. This application continues to include claims 1-148.

The Office Action rejected claims 77-88, 91-94, and 97-114 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,308,637 to Richards (Richards et al.) for reasons of record stated in the earlier Office Action dated March 5, 2007. In the Office Action dated Sept. 19, 2007, the Examiner stated that the Applicant's argument regarding the degree of agitation is not persuasive because the claims are directed to a product and not to a method of making a product. The Examiner further stated that process limitations do not carry any weight in product claims. The Examiner alleged that the Applicant's argument that the product has a different structure than the product of Richards is not persuasive because both of the products are food sauces and Richards' sauce does not exhibit fat separation or fat crystallization. In the Advisory Action, the Examiner stated that in Richards the protein component is found in the milk and chicken.

Applicants submit that the claimed product of the present invention is different and not obvious over the product of Richards et al. because the present invention has different claim limitations than Richards et al. According to the MPEP, To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." See MPEP 2143.03.

First, the present invention includes a solids component that comprises protein and the protein content of sauce base is greater than 3 weight percent. In Richards, thickening agents such as starch are added as the solids component but these do not include protein. See, for example, Richards, col. 3, line 65 to col. 4, line 2. Milk and cream are disclosed as potential aqueous phase additions to the Richards' sauce not as solid phase powders as in the present invention. The addition of powdered protein solids component in the present invention boosts the protein concentration in the sauce compared to the sauce in Richards. Milk generally has about 3.2 percent by weight of protein and thus, in the Richards' sauce, the percent of protein would be well below this amount. There is no teaching or suggestion in Richards related to boosting the protein content of the sauce by addition of powdered solids components.

With respect to chicken in col. 5 of Richards, the discussion is related to aqueous phase being chicken broth. Any chicken would be discreet solids and not part of the oil-in-water emulsion. In addition, there is no teaching or suggestion in Richards related to having a protein concentration in the sauce greater than 3 weight percent. There is no teaching or suggestion in Richards regarding addition of a solids component powder that comprises protein such that the protein concentration is greater than about 3 percent by weight. Applicants' claimed product includes the presence of the solids component powder with protein. In addition, the structure of the product is different due to the use of homogenization, as discussed in the earlier Response of July 25, 2007 and due to the presence of additional protein.

Second, Applicants submit that Richards states that their sauce does not exhibit fat separation or fat crystallization but that is only when the sauce is cooled to 55°F. There is no discussion in Richards regarding the sauce characteristics when cooled below this temperature or when it is reheated to cooking temperature. The sauce of the present invention is heat stable which is the ability to be cycled from refrigerated temperature or ambient temperature to cooking temperature and back without churning out or creaming. See Specification, page 7, lines 16-19. Aqueous components with milkfat, for example cream, must be handled carefully since they are highly susceptible to creaming and churning out. Even minor modifications can lead to a detrimental result. In other words, it is a highly unpredictable art with regards to stability of the product and also the organoleptic properties. The highly desirable heat stability of the sauce base

in addition to its organoleptic properties would not be obvious to a person of ordinary skill in the art.

In light of the above, Applicants request the withdrawal of the rejections based upon Richards et al and allowance of the claims 77-88, 91-94 and 97-114.

The Office Action rejected claims 1-5, 7, 10, 11, 15, 22-39, 77-88, 93, 94 and 97-114 under 35 U.S.C. 103(a) as being unpatentable over Andreae (WO 96/25857) for the reasons of record stated in the earlier Office Action dated March 5, 2007. The Office Action of September 19, 2007 states that the claims now include milkfat and that in the case of Andreae, cheese is the source of the milkfat. The Advisory Action stated that the Andreae discloses water in Tables II and III.

Applicants submit that claim 1 and 77 have been amended to specify that the aqueous component comprises an oil-in-water emulsion containing milkfat with greater than about 30 weight percent moisture. Andreae does not use an aqueous component that is an oil-in-water emulsion with milkfat and with more than about 30 weight percent moisture. Andreae uses cheese and cheese when in melts may go from a solid to a viscous liquid. Melted cheese has different characteristics than the aqueous component of the present invention. A person of ordinary skill in the art would recognize that the use of cheese and the addition of water to cheese would result in different characteristics than the use of an aqueous component that is an oil-in-water emulsion containing milkfat and with more than about 30 weight percent moisture.

The Examiner's statement that the composition on page 2 of Andreae contains the basic ingredients of claim 77 is inappropriate in light of the claim amendments. Furthermore, the emulsion of the present application is different than Andreae because of the presence of the aqueous component comprising an oil-in-water emulsion having milkfat. Since independent claims 1 and 77 are not obvious, dependent claims relating to Alfredo and hollandaise sauce are also not obvious.

In light of the above comments, Applicants request the withdrawal of the rejections based on Andreae and allowance of claims 1-5, 7, 10, 11, 15, 22-39, 77-88, 93, 94 and 97-114.

The Office Action rejected claims 77-83, 86-88, 95-99 and 109-114 under 35 U.S.C. 103 (a) as being unpatentable over Muir (2004/0005996). The Office Action stated that Muir includes butter as a source of milkfat in example 3.

Applicants submit that the butterfat in Muir is added after the dried egg yolks are blended, heated and the pH adjusted to 3.7 by addition of citric acid. The emulsion formed in the sauce of Muir is completely different than the emulsion of the present invention. The emulsions in Muir's sauce comprise lipids stabilized by proteins in cationic form. . See, for example, Muir page 4, column 2, paragraph [0082] and [0083] and claim 25. In contrast, the emulsions in the present invention do not have proteins in a cationic form since no acidification is performed. In fact, a person of ordinary skill in the art would expect that acidification of the claimed aqueous component would result in curdling of the aqueous component.

In light of the above comments, Applicants request the withdrawal of rejections over Muir and allowance of claims 77-83, 86-88, 95-99 and 109-114 is requested.

The Office Action rejected claims 77-90, 97-111, 115-119, 121-124, 133-145, 147 and 148 under 35 U.S.C. 103 (a) as being unpatentable over Irwin (2002/00544939) The Office Action alleges that no unobvious or unexpected difference is seen between the products of Irwin and the products of the claims. The Office Action further alleges that a product may have been made by a different process does not alone constitute unobviousness.

Applicants respectfully disagree with the Examiner. The products of the present invention include a solids powder component comprising protein and thus the sauce base has a protein concentration of greater than 3 weight percent. Irwin does not teach or suggest the use of additional solid protein powder. Thus, the sauces in Irwin have a protein content of well below 3 weight percent. The inclusion of additional protein changes the make-up of the emulsion. The sauce bases of present invention have desirable storability and heat stability.

Furthermore, Applicants submit that the product in the present invention is made by a different process and does result in a different product than the product in Irwin. According to the MPEP, "The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made or where the manufacturing

process steps would be expected to impart distinctive structural characteristics to the final product.” See MPEP, 2113.

Applicants submit that the process steps used by Irwin are different and result in different structural characteristics of the emulsion than the emulsions generated by the steps of the present invention. In the present invention, the aqueous component with milkfat, solids component powder comprising protein, fat phases and the emulsifier are combined prior to the one and only homogenization step. In contrast, Irwin teaches two rounds of homogenization. During the first round of homogenization in Irwin, only cream, liquid cheese and butter are present. There is no emulsifier or other solids components. Irwin thus dictates breakup of the liquid milkfat components before addition of any solids components. Thus, a person of ordinary skill in the art would recognize that the structure and make up of the oil-in-water emulsion formed in the present invention is different and unobvious than the emulsion in Irwin because of the components present in the emulsion and due to the method used to make the emulsion.

In addition, the products in Irwin include the use of a base such as disodium phosphate to increase the pH of the sauce. The products in the present invention are not subject to alkalization as in Irwin.

In light of the discussion above, Applicants submit that the products in the present invention are not obvious in view of Irwin. Applicants request the withdrawal of the rejections based on Irwin and allowance of claims 77-90, 97-111, 115-119, 121-124, 133-145, 147 and 148.

The Office Action rejected claims 115-124, 127-128, and 133-142 under 35 U.S.C. 103 (a) as being unpatentable over Bos (EP 0340857) as further evidenced by Lowe and Peterson. The Examiner stated that Bos discloses an edible oil-in-water emulsion and that cream is added to water, skim milk powder, butterfat and whey protein concentrate. The Examiner further stated that after mixing, pasteurization and homogenization the product is cooled to form a spread. The Examiner relied on Lowe to teach the use of an emulsifier and Peterson to teach that spreads are known to be basic components of sauces.

Applicants submit that the present invention is not obvious in light of the claim amendments. The amended claims recite that the products of the present invention are storable and heat stable. The product of Bos is a spreadable product not a sauce base as in the present

invention. The spreadable product of Bos is not reheated and not subject to the cycles of temperature changes that the sauce base of the present invention. Applicants submit that the spread that is described in Bos would be unstable as it is cycled between refrigerator or ambient temperature or cooking temperature. A person of ordinary skill in the art would expect the oil in water emulsion of Bos would “cream” or “churn out”. Lowe broadly discusses the use of emulsifiers. Lowe does not teach or suggest the heat stable emulsions as in the present invention. The use of emulsifiers used in the particular way described in the Specification is critical to the heat stability of the dairy sauce of the present invention. Applicants are unable to find the location of the recitation in Peterson that spreads are known to be basic components of sauces.

In light of the above comments, Applicants request the withdrawal of the rejections based on Bos as further evidence by Lowe and Peterson. Allowance of claims 115-124, 127-128, and 133-142 is requested.

The Office Action rejected claims 77-88, 93-94, 99, 101-122, 125-128 and 133-148 under 35 U.S.C. 103 (a) as being unpatentable over Stuchell (6,759,078) as further evidenced by Lowe. The Examiner stated that Stuchell discloses an aseptic cream substitute for use in preparing sauce bases and that sauces made are disclosed with the use of the cream substitute. The Examiner stated that the cream substitute is shown to include a water phase and that it is combined with melted butter homogenized, pasteurized and cooled. The Examiner also stated that an emulsifier is not mentioned in the product but it forms an obvious part of the composition and that egg yolks are the emulsifier in the hollandaise formulation. The Office Action stated that processing conditions do not carry any weight in product claims.

Applicants respectfully disagree. Stuchell is related to the production of a cream substitute. Thus, all of the discussion in Stuchell, for example related to homogenization, pasteurization, etc. is related to synthesizing of a cream substitute not for making a sauce as claimed in the present invention. In other words, Stuchell is related to synthesizing an aqueous component. There is no teaching or suggestion in Stuchell regarding the use of their cream substitute to make the heat stable sauces as claimed in the present invention. Stuchell, for example, does not teach or suggest making sauces by adding solids and fat components to the

cream substitute and then homogenizing as disclosed in the present Specification. Stuchell, in column 7, discussing making sauces using the synthesized cream substitute. These sauces do not contain the limitation as recited in the present claims. The sauces described are generic formulations of sauces in which the cream component is substituted with the synthesized cream substitute of Stuchell. Stuchell is silent regarding homogenization, short term stability and long-term stability of these sauces. The homogenization, pasteurization and cooling referred to by the Examiner refers to making of the cream substitute not making of the dairy sauces. The cream substitute made by homogenization, pasteurization, etc. is simply added to the formulations listed in column 7 of Stuchell. The sauces prepared using this method would have all of the limitations and problems of the prior art sauces described in the present Specification on page 1, lines 24 to page 2, line 8.

In light of the above comments, Applicants request the withdrawal of the rejections based on Stuchell as further evidenced by Lowe. Allowance of claims 77-88, 93-94, 99, 101-122, 125-128 and 133-148 is requested.

The Office Action rejected claims 131-132 under 35 U.S.C. 103 (a) as being unpatentable over Irwin as applied to claims 77-90, 97-111, 115-119, 121-124, 133-145, 147 and 148 above and further in view of either Norris (4,005,228) or Youcheff (6,265,007) for the reasons of record in the earlier Office Action dated March 5, 2007. The Examiner stated that the claims appear to differ from Irwin in the recitation of the use of anhydrous fat and that each of Youcheff and Norris teach that anhydrous fat is known in the art and it would have been obvious to one of ordinary skill in the art to utilize the fat of Norris or Youcheff as an obvious alternative source of fat in the Irwin process.

As discussed above, the present invention as claimed is not obvious over Irwin alone for the reasons stated with respect to the rejection of 77-90, 97-111, 115-119, 121-124, 133-145, 147 and 148. Applicants submit that Youcheff and Norris do not add anything to the teachings of Irwin that would obviate the invention as claimed. The use of anhydrous fat in the present claims does not render dependent claims 131-132 obvious over Irwin in view of Youcheff and Norris. Since independent claims 77 and 115 are patentable and not obvious,

dependent claims 131-132 are also patentable and not obvious. Reconsideration and allowance are respectfully requested.

The Office Action rejected claims 129-130 under 35 U.S.C. 103 (a) as being unpatentable over Irwin as applied to claims 77-90, 97-111, 115-119, 121-124, 133-145, 147 and 148 above and further in view of Muir (2004/0005996) for reasons of record in the earlier Office Action dated March 5, 2007. The Examiner stated that the claims appear to differ from Irwin in the recitation of the use of soy protein product and that Muir teaches that soy protein has a known use in emulsion and that it would have been obvious to one of ordinary skill in the art to utilize soy-based cheese as a substitute for dairy cheese in Irwin in order to provide a vegetarian alternative in the sauce.

As discussed above, the present invention is not obvious over Irwin for the reasons stated with respect to claims 77-90, 97-111, 115-119, 121-124, 133-145, 147 and 148. Muir does not add anything to the teachings of Irwin that obviates the present invention as claimed in claims 129-130. Applicants submit that claims 129-130 are dependent on claims 115 and 129, respectively, and are not obvious and patentable because independent claim 115 from which they are dependent is not obvious. Applicants request the withdrawal of the rejection of claims 129-130 over Irwin in view of Muir and allowance of these claims is requested.

The Office Action rejected claims 1-148 under 35 U.S.C. 103 (a) as being unpatentable over Peterson in view of Rispoli (4,689,239) and as further evidenced in view of Lowe and Potter. The Examiner stated that Peterson discloses a sauce preparation where flour and butter are combined and heated as in lines 9-11 of claim 1. The Examiner further stated that the selection and preparation of hot milk is considered to be the step in lines 3-6 of claim 1. The hot milk is added to the mixture to make a sauce as in lines 7-8. The Examiner alleged that claim 1 appears to differ from white roux in the inclusion of additional fat in lines 14-16 of claim 1 but page 121 of Peterson provides for finishing with additional butter to enrich the flavor. The Examiner further alleged that claim 1 differs from Peterson in the use of emulsifier as disclosed in Lowe and the use of homogenization as provided by Potter. The Examiner concluded that it would have been obvious to one of ordinary skill in the art in view of Lowe and Potter to homogenize the sauce of Peterson to stabilize the emulsion. The Examiner also stated that

Peterson differs in temperature and homogenization but scaling up from home based level to commercial level is taught by Rispoli that teaches heating and homogenization and that it would have been obvious to emulsify the sauce of Peterson using homogenization of Rispoli in order to prepare a stable emulsion.

Applicants respectfully disagree with these assertions. The sauces of Peterson are not the heat stable sauces as in the amended claims of the present invention. The methods, the intermediates and the products of Peterson are different from the claimed invention. Peterson teaches to combine butter and flour followed by heating prior to adding the hot milk. Thus, Peterson's first intermediate would be generated when a fat component and a solids component are combined. The second intermediate would be formed when the hot milk, i.e. an aqueous component, is added.

In contrast, in the present invention, the aqueous component and the solids component are combined to form the first intermediate and then a heated fat containing component is added to the first intermediate to form a second intermediate. The intermediates formed in Peterson are different than the intermediates formed in the present invention. Furthermore, a person of ordinary skill in the art would know that this is a highly unpredictable art and the products generated by Peterson would be different than the products generated by the present invention.

Applicants submit the methods and products in the present invention are different than Peterson for the reasons stated above. There is nothing in Potter, Lowe and/or Rispoli, alone or together, that would teach or suggest the claimed invention.

The Examiner referred to Potter as teaching homogenization. Applicants submit that Potter teaches homogenization of milk which is well known in the art. Potter, however, does not teach or suggest the homogenization of an oil-in-water emulsion formed according to the present invention. The addition of a solids component, a fat component and emulsifier adds to the complexity of the product homogenized and persons of ordinary skill in the art would not expect that homogenization of this product would result in a storable, heat stable product.

The Examiner referred to Lowe as teaching that emulsions are stabilized by breaking up of fat or oil droplets. Applicants point out that Lowe goes on to discuss the

unpredictability of forming a stable emulsion and how the types of emulsions formed may be different based on the emulsifier and the conditions in which the emulsification is conducted. See Lowe bottom of page 271 and top of page 272. Lowe does not teach or suggest the emulsion as claimed in the present invention.

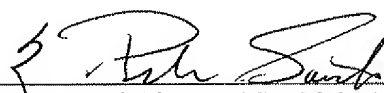
Applicants submit that Rispoli does not teach making products as in the present invention and merely teaches homogenization of sauces where milk, starch and butter are combined and then homogenized. There is no teaching or suggestion that the methods and products of the present invention can be homogenized and that the resulting products would be heat stable.

It is believed that the claims are neither taught nor suggested by the prior art, and a Notice of Allowance is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: 
Z. Peter Sawicki, Reg. No. 30,214
Suite 1400
900 Second Avenue South
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

ZPS:VCG:cmn